

means for embedding additional information in said buffered small domain data without changing the length of the video data stream; and

means for returning said small domain, in which said additional information has been embedded, to said video data.--

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--16. The system according to claim 15, wherein said video data is MPEG video data.--

--17. The system according to claim 16, wherein said video frame is an intra-macroblock of an I-frame, or of a P or B-frame.--

--18. The system according to claim 17, wherein said means for embedding said additional information includes:

means for detecting a DC factor in said buffered small domain;

means for determining whether the bit length of said DC factor will be unchanged even when said additional information has been embedded; and

means for embedding said additional information in said buffered small domain , when said bit length will be unchanged.--

--19. The system according to claim 18, wherein said means for embedding said additional information further includes:

means for determining whether 1/2 of said additional information can be embedded when said bit length will be changed, and for embedding said 1/2 of said additional information in said small domain when embedding is feasible.--

--20. The system according to claim 19, wherein said additional information is an embedding pattern obtained using a pseudorandom number.--

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--21. The system according to claim 20, wherein said small domain is one macroblock domain.--

--22.. A system for detecting additional information in video data, said system comprising:

means for detecting a video frame in video data;

means for extracting data for a small domain from said video frame that is detected, and for buffering some data; and

means for detecting additional information in said small domain that is buffered.--

--23. A method for embedding additional information in video data, said method comprising the steps of:

detecting a video frame in video data;

extracting data for a small domain from said detected video frame and buffering said data;

embedding additional information in said buffered small domain without changing the length of the video data stream; and

returning said small domain, in which said additional information has been embedded, to said video data.--

--24. A method for embedding an electronic watermark in an MPEG stream, said method comprising the steps of:

detecting an intra-macroblock of an I-frame, or a P or B-frame, in an MPEG stream;

extracting data for one macroblock from said MPEG stream and buffering said data when said intra-macroblock of said I-frame, or said P or B -frame, is detected;

embedding an embedding pattern in said buffered macroblock without changing the length of VLC; and

returning said macroblock, in which said embedding pattern has been embedded, to said MPEG stream.--

--25. A method for detecting additional information in video data, said method comprising the steps of:

detecting a video frame in video data;

extracting data for a small domain from said video frame that is detected, and buffering said data; and

detecting additional information in said small domain that is buffered.--

--26. A method for detecting an electronic watermark in an MPEG stream, said method comprising the steps of:

detecting an intra-macroblock of an I-frame or a P or B-frame in an MPEG steam;  
extracting data for one macroblock from said MPEG stream and buffering said data when said intra-macroblock of said I-frame or said P or B -frame is detected; and  
detecting a pattern that is embedded in a DC factor in said macroblock that is buffered.--

--27. A system for controlling the copying of digital data, said system comprising:

means for detecting CCI in input data;  
means for, when said CCI is detected, detecting ECCI in said input data;  
means for, when said ECCI is detected, inhibiting the copying of the digital data;  
and  
means for, when said ECCI is not detected permitting the embedding of said ECCI in said digital data and the copying of the resultant digital data.--

--28. A storage medium on which a program for embedding additional information in video data, said program comprising:

a function for detecting a video frame in video data;  
a function for extracting data for a small domain from said detected video frame  
and for buffering said data;

a function for embedding additional information in said buffered small domain without changing the length of the video data stream; and

a function for returning said small domain, in which said additional information has been embedded, to said video data.--

--29. A storage medium for storing a program for detecting additional information in video data, said program comprising:

a function for detecting a video frame in video data;

a function for extracting data for a small domain from said video frame that is detected, and for buffering said data; and

a function for detecting additional information in said small domain that is buffered.--

--30. An apparatus for embedding additional information in video data comprising:

means for detecting a video frame in the video data;

means for extracting data for a small domain from said detected video frame and for buffering said data;

means for embedding additional information in said buffered small domain data without changing the length of the video data stream; and

means for returning said small domain, in which said additional information has been embedded, to said video data.--

--31. The apparatus according to claim 30, wherein said video data is MPEG video data.--

--32. The apparatus according to claim 31, wherein said video frame is an intra-macroblock of an I-frame, or of a P or B-frame.--

--33. The apparatus according to claim 32, wherein said means for embedding said additional information includes:

means for detecting a DC factor in said buffered small domain;

means for determining whether the bit length of said DC factor will be unchanged even when said additional information has been embedded; and

means for embedding said additional information in said buffered small domain , when said bit length will be unchanged.--

--34. The apparatus according to claim 33, wherein said means for embedding said additional information further includes:

means for determining whether 1/2 of said additional information can be embedded when said bit length will be changed, and for embedding said 1/2 of said additional information in said small domain when embedding is feasible.--

--35. The apparatus according to claim 34, wherein said additional information is an embedding pattern obtained using a pseudorandom number.--

--36. The apparatus according to claim 35, wherein said small domain is one macroblock domain.--

--37. An apparatus for detecting additional information in video data,

comprising:

means for detecting a video frame in video data;

means for extracting data for a small domain from said video frame that is detected, and for buffering some data; and

means for detecting additional information in said small domain that is buffered.--

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